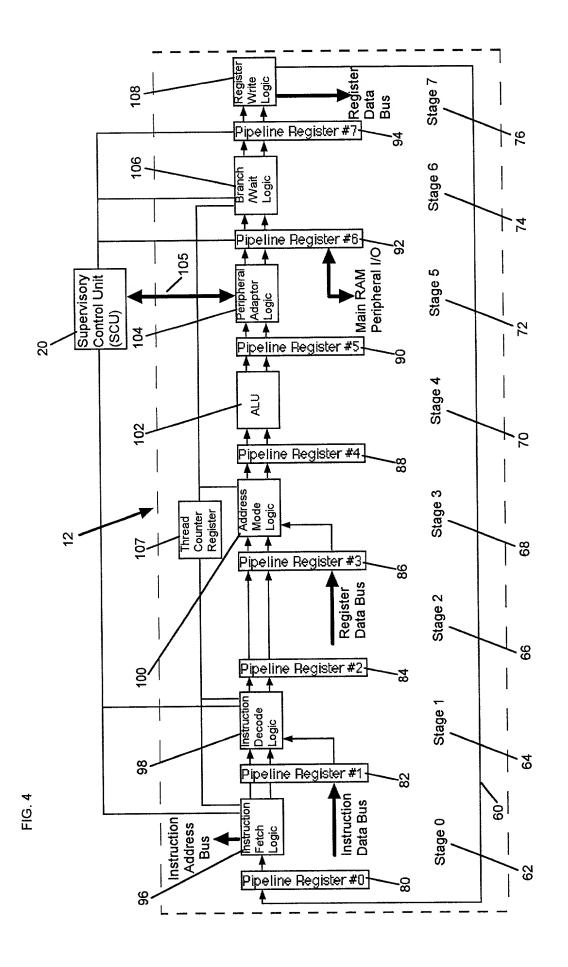


FIG. 3 WRITE **ADDRESS** READ Register R0...R7 Register R0...R7 138 118 -Program Counter Program Counter 136 Condition Code 120 -2 Condition Code -134 122 -Break Point Stop -132 SCU Access Pointer 124 -4 Wait -112 Semaphore Vector Up Vector 126 -5 -109 Down Vector RESERVED 128 -6 -110 Master Clock Control Register Time 44 130



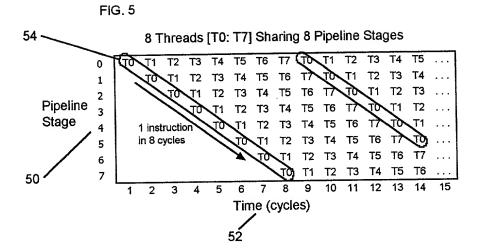


FIG. 6

		RESOURCE	SAGE - Pr	cessor Logic	or System	Memory	1		T	
PIPELINE STAGE Stage # Description		Instruction Fetch Logic	ROM or 2 Port Main RAM	Instruction Decode Logic	Register RAM (3 port)	Address Mode Logic	ALU	Peripheral Adaptor Logic	Branch /Wait Logic	Register Write Logic
	Instruction									
0	Fetch	Used	Read							ļ
1	Instruction Decode		1	Used						
2	Register Reads				Read				ļ	<del> </del>
3	Address Modes				<b>/</b>	Used	<u> </u>		.	<b></b>
4	ALU Operation		<u> </u>				Used		ļ <u> </u>	<del> </del>
5	Memory or I/O Cycle		Read or Write					Read or Write		
6	Branch/Wait								Used	
	Register Write				Write	<u> </u>	<u> </u>		<u> </u>	Used
	5			56						

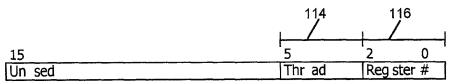


FIG.8

<u>Instr.</u>	Description	Available Address Modes
add and bc bic bis bix bra inp ior jsr ld mov outp rol st sub thrd xor	2's complement add bitwise and conditional branch bit clear bit set bit change unconditional branch read input port bitwise inclusive or jump to subroutine load from RAM move immediate write output port bitwise rotate left store to RAM 2's complement subtract get thread number bitwise exclusive or	register, immediate register, immediate PC relative immediate immediate immediate PC relative immediate PC relative immediate register, immediate register indirect, absolute base displacement, absolut immediate immediate register, immediate register, immediate register, immediate base displacement, absolut register register register, immediate

FIG. 9

140	142	143		
Address Mode	Description	1-Word	2-Word	7
register	Rn	yes	no	$\dashv$
register indirect	*Rn	yes	no	
base displacement	*(Rn+K)	yes	yes	٦
PC relative	*(PC+K)	yes	yes	
absolute	*K	no	yes	
immediate	K	some	some	$\neg$